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**INCREASED FOOD SECURITY IN FOUR PROVINCES  
CATHOLIC RELIEF SERVICES BURUNDI PROGRAM  
OFDA GRANT # AOT-G-00-97-00-358-00  
MID-TERM EVALUATION  
JANUARY 31, 1998**

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Increased Food Security in Four Provinces began in late September 1997 and will terminate on June 30 1998. The goal of this project is to increase agricultural production for 35,625 families in the provinces of Gitega, Muramvya, Rutana and Bujumbura Rural. The objectives are to 1.) increase food security in Muramvya and Gitega Provinces by producing 340 MT of Irish potato seed and 33.6 MT of bean seed<sup>1</sup>; 2.) increase pre-base rice and corn seed by 30 MT and 10 MT, respectively by June 30, 1998.

This mid-term evaluation was conducted by Suzanne Manzer, Program Manager, Christian Nzeyimana, agricultural consultant, Director of DPAE Muramvya, Director of DPAE Gitega, site Directors at ISABU seed centers in Mahwa, Nyakararo, Mahwa, Gisozi and Moso, and input from the FAO Emergency Office in Bujumbura. The current evaluation only discusses activities and project implementation to date, and, as a result, only considers season A 1998.

## I. PROGRAM OBJECTIVES

Objective :

- 1.) Increase food security in Muramvya and Gitega Provinces by producing 340 MT of Irish potato seed and 33.6 MT of bean seed.

### A. PRODUCTION LEVELS

The project planned to plant 34 hectares of Irish potatoes for season A and 52 hectares of beans in season B. The project had difficulty in securing all the seed and was only been able to plant 31.6 hectares of Irish potatoes. Below is a break-down by site of the expected versus the actual surface area planted.

Site	Surface Area by Hectare		
	Expected	Actual	Gap
Nyabisindu	10	9.5	-.5
Ruzibazi	10	8.5	-1.5
Rutegama	5	5.6	+.6
Makebuko	5	5	0
Mutobo	4	3	-1
<b>Total</b>	<b>34 ha</b>	<b>31.6 ha</b>	<b>-2.4 ha</b>

For the original surface area of 34 hectares, 68 MT of Irish potato seed was ordered. CRS received only 48.1 MT, a 29.2 % reduction. Reasons for reduced seed quantities are explained in the following section. An observation on the current vegetative state reveals an infestation of bacteria in some of the seed acquired by CRS. Certain areas reveal an infestation rate as high as 40%. The high propagation rate was fueled by the heavy rains in season A and is especially noticeable in Gitega Province where the climatic characteristics favor the spread of bacteria. In the Gitega seed sites of Rutegama, Makebuko and Mutobo, a 40% loss is expected. In Nyabisindu and Ruzibazi, a 10% and 2% loss, respectively, is expected.

<sup>1</sup> In the original project document, dated 25 July 1997, there was an error in bean and Irish potato seed quantities. The objective should read as it is stated here.

The first objective projected a production of 340 MT of Irish potatoes. At this point, before the harvest, the estimates are lower than 340 MT. Below is the comparison the production goal versus current estimates of harvest levels for season A.

Site	Goal	MT Production Numbers	
		Current Estimate	Gap
Nyabisindu	100	85.5	-14.5
Ruzibazi	100	83.3	-16.7
Rutegama	50	33.6	-16.4
Makebuko	40	18	-22
Mutobo	50	30	-20
<b>Total</b>	<b>340 MT</b>	<b>252.4 MT</b>	<b>-89.6 MT</b>

In sum, the reduced harvest is attributed to bacteria found in the Irish potato seed and the inability to receive all the expected seed from the supplier.

## B. BENEFICIARY LEVELS

During the implementation of the first objective, the project estimated that 5,625 families or 28,125 individuals would be targeted. The break-down of beneficiaries is as follows :

### Projected Beneficiary Population Numbers

Site	Families	Individuals
Nyabisindu/Ruzibazi (Muramvya)	1,500	7,500
Rutegama/Makebuko/Mutobo (Gitega)	4,125	20,625
<b>Total</b>	<b>5,625</b>	<b>28,125</b>

### Actual Beneficiary Population Numbers

Site	Families	Individuals
Nyabisindu/Ruzibazi	1,309	6,545
Rutegama/Makebuko/Mutobo	888	4,440
<b>Total</b>	<b>2,197</b>	<b>10,985</b>

During project planning, the beneficiaries from the Rutegama/Makebuko/Mutobo sites in Gitega Province were estimated by the Provincial Department of Agriculture (DPAE). Actual beneficiary numbers were much lower than estimated. One site, Makebuko, had never been cultivated and targeted projections were over estimated.

## C. PROGRESS VIS A VIS INDICATORS

### Objective One Indicators :

1. Materials purchased and delivered within the planned time-frame.

#### Progress :

Materials were not purchased within the specified time-frame. The season started much later than planned and purchases were delayed intentionally. This poses no threat to harvest projections. A summary of the purchase activities is below :

	Expected	Quantity		Period	
		Actual	Gap	Expected Date	Actual Date
Seed	68 MT	48.1 MT	19.9	Sept 1997	20-27 Oct. 1997
Fertilizer	11.2 MT	11.2	0	Sept 1997	Oct. 1997
Calcaire	34 MT	34 MT	0	Sept 1997	Oct. 1997
Dithane	.51 MT	.51 MT	0	Sept 1997	Dec. 1997

## 2. Beneficiaries trained in agricultural techniques.

### Progress :

In the two provinces of Gitega and Muramvya, training was intended for the beneficiaries. A total of 344 and 170 beneficiaries were trained, respectively, in Gitega and Muramvya. In the pre-base seed multiplication sites, no training was intended. Labor was paid through the support of Christian Aid, details are below.

## 3. Crops planted in accordance with implementation plan.

### Progress :

Crops were not all planted within the specified time-frame, due to a delay in the start of the season. Activities were just shifted to a later date to correspond to the beginning of the season. Below is a summary of planting activities vis a vis the implementation plan.

	Expected	Quantity		Period	
		Actual	Gap	Expected Date	Actual Date
Potatoes	34 ha.	31.6 ha.	2.4 ha.	Oct. 1997	Nov. 1997
Beans	52 ha.	-	-	-	-

## 4. 86 hectares of crops planted before June 1998.

As mentioned directly above, 31.4 hectares have been planted, 2.4 hectares below the planned quantity. To fully comment on this indicator, CRS will have to wait until the harvesting of both seasons is complete in June 1998. Full comment will be given in the final evaluation.

## 5. Produce 340 MT Irish Potatoes and 33.6 MT beans by June 1998.

Full comment will be given after the harvest of season A and B 1998.

## 6. Beneficiaries trained in harvesting and seed conservation techniques.

Full comment will be given after the harvest of season A 1998, March-April 1998.

## PROGRAM OBJECTIVE

### Objective :

2.) Increase pre-base rice and corn seed by 30 MT and 10 MT, respectively by June 30, 1998.

## A. PRODUCTIONS LEVELS

A total of 10 hectares of pre-base corn and 10 hectares of pre-base rice were intended for season A and B, producing a total, respectively, of 30 MT and 10 MT by June 30, 1998. In season A, 1998, the project has thus far planted a total of 11.2 hectares of corn, a 12 % increase. In regards to rice, the project has planted a total of 6 hectares and is continuing to plant the remaining 4 by February 15, 1998. Planting has been delayed in one site due to labor constraints. However, all the intended surface area will be cultivated.

Surface Area by Hectare				
Site	Crop	Expected	Actual (to date)	Gap
Gisozi	corn	3	3.2	+2
Mahwa	corn	7	5	-2
Nyakararo	corn	0	3	+3
Moso	rice	5	1	-4
Imbo-Center	rice	5	5	0
<b>Total</b>		<b>20 ha</b>	<b>17.2</b>	<b>-2.8</b>

MT Production Numbers			
Site	Goal	Current Estimate	Gap
Gisozi	3 MT	4.8 MT	+ 1.8
Mahwa	7 MT	7.5 MT	+ 2.5
Nyakararo	0	4.5 MT	+ 4.5
Moso	15 MT	15 MT	0
Imbo-Center	15 MT	15 MT	0
<b>Total</b>	<b>40 MT</b>	<b>46.8 MT</b>	<b>+ 6.8 MT</b>

Once the remaining 4 hectares are planted at the Moso site, the production estimates expect a 6.8 MT increase.

## B. BENEFICIARY LEVELS

In regards to objective two, the project planned to assist both primary and secondary beneficiaries. The primary beneficiaries being the 15 DPAE centers around Burundi and the secondary being 30,000 families who would benefit from the seed at the 15 DPAE centers. A total of 2,000 families (10,000 individuals) were estimated to benefit from seed at each DPAE center.

For the corn seed, five DPAE centers will receive corn : Bururi, Muramvya, Kayanza, Gitega, Bujumbura Rural. The other ten centers do not cultivate corn supplied from the DPAE. At the five centers, a total of 1,400 families (7,000 individuals) will benefit.

In regards to rice, ten DPAE centers will receive rice : Bubanza, Bujumbura Rural, Cankuzo, Karuzi, Kirundo, Gitega, Muyinga, Ngozi and Ruyigi. A total of 1,200 families (6,000 individuals) will benefit from the rice.

The project will meet the estimated number of primary beneficiaries, DPAE centers, as specified in the project proposal. However, the secondary beneficiaries were over estimated in the original project. The project will meet either 6,000 or 7,000 individuals per DPAE center instead of the intended 10,000.

## C. PROGRESS VIS A VIS INDICATORS

### Objective Two Indicators :

1. Agricultural inputs purchased in September 1997.

**Progress :**

1. The agricultural inputs, seed, fertilizer and phytosanitary products, were to be purchased in September 1997, in keeping with the implementation plan. Since the season was delayed there was no need to purchase inputs in September. Purchases were made in October and November with no detriment to the crop quality.

2. **Produce 30 MT of rice and 10 MT of corn by July, 1998.**

**Progress :**

1. An estimated 30 MT of rice and 16.8 MT of corn will be produced by July 1998, a 68% increase in corn production.

**I. PROBLEMS ENCOUNTERED/CORRECTIVE PROCEDURES****A. Confiscation of CRS Motorola and Codan Radios by the Burundian Government**

On January 22, 1998, the CRS Burundi program was notified by the Burundian Government that the above mentioned radios would be retained by the government, following a Codan radio theft. Unfortunately, a CRS vehicle was broken into and the radio stolen in December 1997. At this point, the CRS Burundi program is continuing to discuss with the government measures to resolve the problem. Until, the radios are returned to CRS, CRS Burundi personnel can not, due to security precautions, leave Bujumbura to monitor the project. As a result, CRS Burundi proposes to suspend financing, temporarily until the radios are returned. The radios are hoped to be returned to CRS Burundi in the next week or two.

**B. Seed Procurement Problem**

The project planned to plant a total of 34 hectares of Irish potatoes in season A 1998, requiring 68 MT of seed. CRS receiving only 48.1 MT, found seed from another source to make up almost the full difference. A total of 31.6 hectares were planted.

Irish potato is a highly demanded, yet difficult to find, seed in Burundi. The Burundi Agricultural Department produces Irish potato seed at a large center in Bururi Province. During project development, CRS met with the major intervening actors in the agricultural sector and agreed that CRS would purchase Irish potato seed from the Bururi center. A letter confirming the agreement was sent to CRS prior to the agricultural season. However, due to a poor harvest, insects and underestimation of Irish potato harvest quantities, CRS did not receive all of the ordered seed from the Bururi center.

CRS realizing that the Muramvya Province seed multiplication sites would be in short supply of seed, worked with the seed sites to find seed in the area to make up the difference. CRS also notified the General Director of the Burundi Agricultural Department (DGA), the OFDA Burundi representative, the FAO Emergency Office, and the Director of Plants and Seeds (DGA), concerning the problem.

**C. Delayed, Heavy Rain**

The El Nino phenomenon hit all of East Africa, including Burundi, with delayed, heavy rain. Harvests in several East African countries are facing famine harvest proportions this year. The Institute Geographique du Burundi has recently issued rain figures showing the problematic nature of the rain for season A 1998 :

Province	Normal for Season				Actual for Season			
	Sept	Oct	Nov	Dec	Sept	Oct	Nov	Dec
Gitega	63.9	99.0	158.2	149.8	6.2	133.5	255.7	244.9
Muramvya	63.5	133.2	210.1	180.8	9.3	181.8	329.3	290.5
Bujumbura								
Rural	38.6	57.0	102.3	92.8	5.5	111.5	64.9	143.0
Rutana	Estimates are unavailable				Estimates are unavailable			

(rain quantities are given in millimeters)

Rain normally begins in September with planting activities falling between the 15<sup>th</sup> and 30<sup>th</sup> of the month. This year, planting took place between October 15<sup>th</sup> and 30<sup>th</sup>. The delay in the planting did not create any substantial problems for the crop. Rather, the heavy nature of the rains latter in the season increased mildew, insects and reduced the number of available working days at the seed sites.

#### **D. Changes in Implementation Plan**

The Implementation Plan was delayed due to the late rains. The whole cycle of activities originally planned is off by a few months. The original plan called for Irish potato seed planting, purchasing and warehouse rental all in September 1997. The seed and inputs were not purchased until October and November and the warehouses rented in December. Harvesting is expected in March and April 1998, instead of January - February.

In regards to corn production, original plans called for planting in September. They were carried out in November. Harvesting will be delayed from February to April. Rice planting in some cases is still be carried out. Harvesting is expected for July 1998, instead of May. In general, the late rains delayed the implementation schedule by two months.

#### **E. Labor Constraints at ISABU Stations**

Pre-base seed production is conducted at five ISABU stations in Gitega, Muramvya, Rutana and Bujumbura Rural provinces. Several stations had problems in securing labor at the ISABU salary price. The stations evaluated their salaries, and, in some cases, were able to elevate the salary a small amount, attracting local labor. Other stations were able to reorganize work and resolve the issue.

The Moso Station in Rutana is the only station with continuing problems. During a monitoring visit, the CRS program manager and CRS agricultural consultant discussed the issue with the station director and the local laborers. The director has supplied transportation for the laborers, created teams and given contracts based on the difficulty of the work. The director is continuing to monitor daily work, guiding agricultural techniques and organizing workers.

Currently, of the rice and corn crops planted, a normal level of growth is recorded for the period. The Moso station has only planted one hectare of rice out of the five planned for the project. The director estimates that the additional four hectares will be planted by February 15. The delay in planting is not estimated to reduce harvest production.

### **III. SIGNIFICANT PROGRAM DEVELOPMENTS**

#### **A. Catholic Relief Services Support for Fertilizer Needs**

To complete the agricultural input needs for seed production, Catholic Relief Services Burundi contacted and secured private funding money from CRS for fertilizer and phytosanitary products at sites in Gitega and Muramvya Provinces. CRS contributed 48,565 USD.

## **B. Christian Aid Assistance to Pre-Base Production**

The pre-base seed production of corn and rice is carried out at ISABU (The Burundian Institute of Agrinomical Science) seed sites. OFDA contributed 24,000 USD to manual labor, transporation of agricultural materials and fuel for monitoring visits. To complete the financing, Christian Aid contributed 9,747 USD to cover phytosanitary products, fertilizer and fuel for mechanical machinery.

## **C. Nyakararo Center Added for Pre-Base Corn Production**

The original text specified that pre-base seed production would occur at four sites : Moso, Imbo-Center, Gisozi, and Mahwa. To best utilize the land, it was decided that only five hectares instead of seven would be planted at Mahwa. The remaining two hectares and an additional one were planted at the Nyakararo seed site, located close by Mahwa.

## **IV. BUDGET EXPENDITURES**

The following page includes a budget summary of the actual expenditures to date, the expected expenditures to date and the original total budget. Below is an explanation of the differences in the actual versus expected budget.

### **I. PERSONNEL**

Salaries for local staff, the agricultural consultant, driver and administrative assistant were higher due to a war tax of 6 %, higher than expeceted social security, revenue tax and severence pay.

### **II. CAPITAL EQUIPMENT**

A local purchase Mazda pick - up truck was priced at 26,762 USD at the beginning of the project. At the time of purchase, the truck cost only 22,016 USD. The same situation occured for the computer equipment. The proforma was for 6,906 USD. At purchase date, the computer equipment cost 6,271 USD.

### **III. TRAVEL**

Fuel prices have been reduced from when the cost was estimated. Fuel price was estimated at 750 FBU/ litre, the current price is 350 FBU / litre. Since the project began in late September, monitoring began in October, and, due to the loss of radios, CRS has not been able to monitor the project since January 22, 1998.

### **IV. SUPPLIES AND MATERIAL**

Many of the seeds were not purchased, as explained above. The manual labor for objective two was estimated at 7.018 USD. Since the season had a late start, the labor costs have not been totally expensed to the project.

### **V. TRANSPORT/WAREHOUSEING**

The warehouseing costs have not been expensed in total, due to the late season start.

### **VI. OTHER DIRECT COSTS**

CRS Burundi has not expensed as many office supplies and vehicle maintenance to the project as estimated. As explained in the first quarterly financial report, the rent and utilities have not yet been expensed to the project.

### **VII. EVALUATION**

The evaluation costs were estimated for the final evaluation, not yet conducted.

Budget Line Items	Objective I			Objective II			TOTAL
	Actual*	Expected**	Total Budget	Actual	Expected	Total Budget	BUDGET
I. PERSONNEL							
Agricultural Consultant	2.844	2.423	4.846	948	808	1.615	6.461
Program Manager	3.400	3.400	6.800	1.700	1.700	3.400	10.200
Driver	532	462	923	532	462	923	1.846
Administrative Assistant	1.423	1.154	2.308	1.423	1.154	2.308	4.616
SUB-TOTAL I	8.199	7439	14.877	4.603	4.124	8.246	23.123
II. CAPITAL EQUIPMENT							
1 Pick-Up Truck	11.008	13.500	13.500	11.008	13.500	13.500	27.000
1 CODAN Radio	2.150	2.300	2.300	2.150	2.300	2.300	4.600
Computer Equipment	3.136	3.250	3.250	3.136	3.250	3.250	6.500
SUB-TOTAL II	16.294	19050	19.050	16.294	19.050	19.050	38.100
III. TRAVEL							
Fuel	1.082	3.470	6.938	835	4.007	8.014	14.952
Per Diem	511	628	1.255	511	649	1.298	2.553
SUB-TOTAL III	1.593	4098	8.193	1.346	4.656	9.312	17.505
IV. SUPPLIES & MATERIALS							
Seeds	14.465	31.385	34.615	0	0	0	34.615
Manual Labor	0	0	0	1.309	7.018	14.035	14.035
SUB-TOTAL IV	14.465	31385	34.615	1.309	7.018	14.035	48.650
V. TRANSPORT/WAREHOUSEING							
Transport of Materials	4.246	3.807	5.493	875	875	2.154	7.647
Warehousing	7.453	24.614	24.614	0	0	0	24.614
Loading/Off Loading	215	562	562	0	0	0	562
SUB-TOTAL V	11.914	28.983	30.669	875	875	2.154	32.823
VI. OTHER DIRECT COSTS							
Communications	609	625	1.250	609	625	1.250	2.500
Office Supplies	124	625	1.250	124	625	1.250	2.500
Office Rent/Utilities	0	1.875	3.750	0	1.875	3.750	7.500
Vehicle Insurance	548	923	1.846	183	308	615	2.461
Vehicle Maintenance	411	2.135	4.270	137	173	346	5.078
Vehicle Repairs	6.711	8259	8.259	0	0	0	8.259
SUB-TOTAL VI	8403	14442	20.625	1.053	3.606	7.211	28.298
VII. EVALUATION							
Per Diem/Hotel	0	0	764	0	0	764	1.528
Plane Ticket	0	0	400	0	0	400	800
Fuel	0	0	358	0	0	358	716
SUB-TOTAL VII	0	0	1.522	0	0	1.522	3.044
TOTAL DIRECT COSTS	60.868	105.067	129.551	25.483	39.329	61.530	191.081
INDIRECT COST (22.45%)	13.665	23.588	24.807	5.721	8.829	9.537	34.344
TOTAL ESTIMATED COST	74.533	128.655	154.358	31.204	48.158	71.067	225.425

\* Actual reflects the actual budget expenditure to date. \*\* Expected reflects the expected budget expenditure to date at the time of project proposal.